To: Schaefer, Joe[Schaefer.Joe@epa.gov]; Adamczyk,

Megan[Megan.Adamczyk@WestonSolutions.com]; jmiller@techlawinc.com[jmiller@techlawinc.com];

Patterson, Molly[Molly.Patterson@WestonSolutions.com]

Cc: Burgo, Daniel[Burgo.Daniel@epa.gov]

From: Lucotch, John

Sent: Sun 8/16/2015 4:37:32 AM Subject: RE: GKM Intial Auditor Rules

Okay we will take care of ASAP. Thanks

From: Schaefer, Joe [mailto:Schaefer.Joe@epa.gov]

Sent: Saturday, August 15, 2015 10:36 PM

To: Lucotch, John < John.Lucotch@WestonSolutions.com>; Adamczyk, Megan

<Megan.Adamczyk@WestonSolutions.com>; jmiller@techlawinc.com; Patterson, Molly

<Molly.Patterson@WestonSolutions.com>
Cc: Burgo, Daniel <Burgo.Daniel@epa.gov>
Subject: Re: GKM Intial Auditor Rules

Because of the public viewer this is probably the top priority

Rule - Total_Or_Dissolved

Majority R08, For any metals results we need to have them identified as being a T or D result. Ignore the water quality ones that show up in the guery for now.

Joe Schaefer

US EPA/Environmental Response Team

(732) 906-6920 (office)

(609) 865-8111 (cell)

From: Lucotch, John < John.Lucotch@WestonSolutions.com>

Sent: Sunday, August 16, 2015 12:33 AM

To: Adamczyk, Megan; jmiller@techlawinc.com; Patterson, Molly

Cc: Schaefer, Joe; <u>John.Lucotch@WestonSolutions.com</u>

Subject: FW: GKM Intial Auditor Rules

Here are the auditor rules R8 Data Team

From: Schaefer, Joe [mailto:Schaefer.Joe@epa.gov]

Sent: Saturday, August 15, 2015 10:24 PM

To: Latham (Polinko), Janine < <u>Janine.Latham@WestonSolutions.com</u>>; Morgan, Bradley

<Brad.Morgan@WestonSolutions.com>

Cc: Delgado, Eric < Delgado. Eric@epa.gov >; Burgo, Daniel < Burgo. Daniel@epa.gov >;

Wenning, Stephanie < Wenning.Stephanie@epa.gov >; ERT Support < ERTSupport@epa.gov >; Fuller, Kris < Kris.Fuller@WestonSolutions.com >; Melissa Bonds < melissa.bonds@gmail.com >;

McGuire, Frank <McGuire.Frank@epa.gov>; Lucotch, John

<John.Lucotch@WestonSolutions.com>

Subject: GKM Intial Auditor Rules

Janine/Brad,

(I didn't have the email addresses for all your project owners handy, can you please forward and cc me)

I have added 15 Auditor rules under "Gold King Mine" accessible via the Scribe.NET menu. There are three rule sets (Analytical, Sampling and Combined). For reference attached is the current list of Required Data elements and valid values.

I'm still working on a few rules that are escaping my rudimentary at best SQL skillz. I will eventually add rules to check Sample Date, that Event ID = Sample Date, and checking the QADate but I need to call in the query cavalry on my side tomorrow AM.

Here is a rough rundown on how each Region fairs with the existing rules based on the published combined project. If new data from the Regions has been published since the combined it won't be reflected in the below summary.

Rule - GKM Analyte Valid Values

R8 project has a handful of analytes listed as TDS those should be changed to Total Dissolved Solids

Rule - GKM Analysis Valid Values

Everyone passes!

Rule- GKM CAS_NO Valid Values

R8 has some blank CAS numbers (for now use NA for anything you don't have a CAS number for) and a few where the EDDs must have turned into a date instead of the CAS number prior to import

Rule - GKM QA_Comment Valid Values

R6 has about 600 results where QA_Comment was not populated QC_Type was populated instead.

R8 has 2191 results with no QA_Comment populated. I think it would be best to identify those as "Prelim" (assuming of course they are prelim and not just missing their L2 Val tag

R9 has 265 results that have LV2 Val they should be updated with either L2 Val or the other more specific valid values

Rule -Lab Results without Samples

R8 appears to have results for three samples where the lab messed up the sample number in the EDD. R8 should also spot check the lab results that are showing as having a sample number of Arsenic, Dissolved, Calcium Dissolved, Durango Water intake

R9 appears to have 4 where the lab reported sample number doesn't match whats in Scribe

Distinct LabResults Without Samples		
Site_No	Samp_No	
A8K9	Arsenic, Dissolved	
A8K9	Calcium, Dissolved	
A8K9	Durango Water Intake_080615	
A8K9	GKMSE01D_081115	
A8K9	GKMTW 36_081015	
A8K9	GKTMW111_081515	
R9080515	MECT-081115-10	
R9080515	SJFP-81115-10	
R9080515	SJHB-081015-09	
R9080515	SJLP-81115-10	

Rule - GKM Sample Matrix

All pass!

Rule - Lat Check

I used 36 as the Lattitude lower limit

R06 has 4 locations less than 36

10958SA005	35.74278	-108.44241
10958SA006	35.74278	-108.44241
10958SB005	35.74278	-108.44241
10958SB006	35.74278	-108.44241

Let me know if I need to adjust the lower limit value

R08 has 5 Locations with 0,0 coordinates

Rule - Long Check

R08 has 5 Locations with 0,0 coordinates

Rule - Location_Image_Path

Region 06 is not populating the Location_Image_Path field in their sampling project. Value should be R06

Rule - Detected Valid Values

It seems like we shouldn't have reportable results with UNK in the Detected Field. R06 has several results with UNK.

We can choose to allow blanks here I just need to adjust the query. That would knock out a lot of the R08 results that are coming up.

Rule - Reporting Limit Units Valid Values

R6 and R8 have blank reporting limit units for many of their lab results

Rule - MDL Units Valid Values

R6 and R8 have blank MDL units for many of their lab results

Rule - Result Qualifier Valid Values

Ignore this one for now. I have to tweak the SQL

Rule - Result Units

R08 has a handful of "pH Units" those need to be changed to "SU" for standard units

Rule - Total_Or_Dissolved

Majority R08, For any metals results we need to have them identified as being a T or D result. Ignore the water quality ones that show up in the query for now.

The auditor rules are live and can be run from the Scribe.NET menu. I would take a crack at fixing some of the bigger issues (CAS_No

Also for reference attached is the current version of the GKM Auditor project.

Joe Schaefer

US EPA/Environmental Response Team

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